

CORNELL UNIVERSITY OFFICIAL PUBLICATION

VOLUME IX

NUMBER 4

NEW YORK STATE COLLEGE OF AGRICULTURE ANNOUNCEMENT OF INSTRUCTION IN WILD LIFE CONSERVATION AND GAME BREEDING

JANUARY 15, 1918
PUBLISHED BY CORNELL UNIVERSITY
ITHACA, NEW YORK

CALENDAR

First Term, 1917-18

Sept. 27,	Thursday,	Instruction begins in regular courses.
Jan. 21,	Monday,	Term examinations begin.

Second Term, 1917-18

Jan. 28,	Monday,	Instruction in regular courses begins.
Feb. 18,	Monday,	Registration in short course in game breeding, beginning at 9 a. m. at the office of the Secretary, Roberts Hall, room 192.
		Short course assembly at 4 p. m., Roberts Hall, Assembly Room.
Feb. 19,	Tuesday,	Instruction in short course begins.
Feb. 23,	Saturday,	Last day for payment of tuition and fees at office of the University Treasurer, Morrill Hall.
May 10,	Friday,	Instruction in short course in game breeding ends.
May 13,	Monday,	Practice on game farm begins.
May 22,	Wednesday,	Fiftieth Annual Commencement.
Aug. 31,	Saturday,	Practice on game farm ends.

NEW YORK STATE COLLEGE OF AGRICULTURE

STAFF OF ADMINISTRATION AND INSTRUCTION IN WILD LIFE CONSERVATION AND GAME BREEDING

Jacob Gould Schurman, A.M., D.Sc., LL.D., President of the University.

Albert Russell Mann, B.S.A., A.M., Dean of the College of Agriculture, Director of the Experiment Station, and Director of Extension.

John Lemuel Stone, B.Agr., Professor of Farm Practice.

James Edward Rice, B.S.A., Professor of Poultry Husbandry and Superintendent of the Game Farm.

James George Needham, Ph.D., Professor of Entomology and Limnology.

Ralph Sheldon Hosmer, B.A.S., M.F., Professor of Forestry.

Edward Gerrard Montgomery, M.A., Professor of Farm Crops.

Cornelius Betten, Ph.D., Professor, Secretary, and Registrar.

George Charles Embury, Ph.D., Assistant Professor of Aquiculture.

Mrs. Anna Botsford Comstock, B.S., Assistant Professor of Nature Study.

Earl Whitney Benjamin, B.S. in Agr., M.S. in Agr., Ph.D., Assistant Professor of Poultry Husbandry.

Arthur Augustus Allen, Ph.D., Assistant Professor of Ornithology.

Earl Max Pickens, D.V.M., Assistant Professor in Diagnosis in the New York State Veterinary College.

Olney Brown Kent, B.S., Ph.D., Assistant Professor of Poultry Husbandry.

Archie Byron Dann, B.S., Instructor in Poultry Husbandry.

Wallace Larkin Chandler, B.S., M.S., Ph.D., Instructor in Parasitology.

Gustave Frederick Heuser, B.S., Instructor in Poultry Husbandry.

Olin Whitney Smith, B.S., Assistant Registrar.

Olin Clifford Krum, B.S., Assistant in Poultry Husbandry and Assistant Superintendent of the Game Farm.

Claude Willard Leister, B.S., Assistant in Ornithology.

Laura Florence, B.Sc., M.A., Assistant in Entomology.

INSTRUCTION IN WILD LIFE CONSERVATION AND GAME BREEDING

Recognizing that we are at the beginning of knowledge of our plant and animal resources, this new educational enterprise takes for its scope the wild life of New York State and the conservation of all that is valuable in it. Beginning with the rearing of game birds and waterfowl, to replace in some measure these rapidly vanishing wild groups, it is expected that this work will be extended to the conservation and care of fur-bearing animals, of valuable song birds, of wild flowers and useful native shrubbery, and of every wild thing that gives promise of being used for the material or educational betterment of the people. All life was once wild life. Agriculture has grown by selection and care of the best that nature offers. This work is initiated in the firm belief that the sources of our benefits in nature are by no means exhausted.

By recent act of the New York State Legislature, establishing a state game farm in connection with the New York State College of Agriculture at Cornell University and authorizing the College to undertake instruction in game breeding, opportunity has been made for obtaining practical instruction in wild life conservation. Under authority of this act, options have been obtained on a farm near Ithaca, excellently located, and possessed of unusual natural advantages for the purposes for which it is to be employed. Breeding of ring-necked pheasants and mallard ducks will be carried on on this farm during the first season of its operation, and in succeeding years the work will be gradually enlarged to include other species of useful game birds, fishes, and other animals. Game breeding as a farm enterprise will be studied, and students will be afforded ample opportunity to engage in practical game-breeding work on this farm. Wild species will be reared to determine their possibilities for increased food production and for utilization of waste lands in the State. Emphasis will be given to the correlation of game breeding and the different types of farming in New York State.

Instruction in wild life conservation and in game breeding is offered by the College of Agriculture in the following courses:

1. The regular four year course in agriculture in which students may include among their elections the subjects that are fundamental to wild life conservation and game breeding.
2. A short course of twelve weeks (to be followed by one or more seasons of work on a game farm) to give practical training in the technique of game breeding (page 6).
3. A series of public lectures to be given by experts in the various lines of wild life conservation (page 8).

1. A Four Year Course

The curriculum of the four-year course in agriculture furnishes the scientific training that is essential to those who plan to make conservation their life work, and the courses regularly offered cover most of the subject matter needed by the conservationist and the game breeder. In order to correlate this material and to consider the special problems of game breeding, a lecture course has been introduced into the curriculum, open to election by all students in the College and required of those specializing in these subjects.

The four year course in the College of Agriculture affords opportunity for the training essential to those who look forward to taking positions as managers of game preserves, technical assistants to state fish and game commissions, secretaries of sportsmen's clubs and Audubon societies, assistants to state ornithologists, and to those who hope to find employment with the United States Biological Survey and the Bureau of Fisheries, or to engage in work at zoological gardens and public parks that make a specialty of wild life.

Students enrolled in this course become candidates for the degree of bachelor of science, and applicants will find a full statement of the terms of admission, tuition and fees, and requirements for graduation in the regular college announcement, which will be sent upon request to the Secretary of the College of Agriculture, Ithaca, New York. The course for those specializing in wild life conservation and game breeding comprises:

a. The studies required of all regular students in the College of Agriculture. These include English, political science, chemistry, physics, botany, zoology, biology, natural history of the farm, geology, and physiology, making a total of fifty or fifty-one of the one hundred and twenty credit hours required for graduation.

b. A course in the conservation of wild life and game breeding. This is a two-hour lecture course during the second term. The course is given in cooperation by members of several college departments, and it is intended to show the relations of the various conservation interests to each other and to give the student who plans to fit himself for work in game breeding or other lines of conservation a general view of the field and a basis for the selection of subsequent elective courses.

c. Elective courses to make up the remainder of the one hundred and twenty hours required for graduation, to be chosen with the approval of the student's faculty adviser. The following are among the regular courses that are available for possible election; descriptions of all but the first may be found in the announcement of regular courses in the College of Agriculture:

Zoology 5, 7, 8, 10 (See announcement of the College of Arts and Sciences.).

Poultry Husbandry 1, 1a, 2, 2a, 3, 3a, 4, 5, 7, 7a, 8.

Entomology, Limnology, and Nature Study 2, 3, 30, 50, 51 (Aquiculture), 52 (Fish Culture), 61.

Ornithology 6, 9, 11.

Botany 6a.

Farm Crops 1.

Farm Management 1, 2.

Extension Teaching 1.

Forestry 1, 2, 3, 5.

Rural Engineering 1, 20.

Soil Technology 1.

d. The special public lectures announced for the second term (page 8).

e. Two summers of practical work in the field, one of which should be spent on the state game farm at Cornell University.

2. The Short Course

This twelve weeks course beginning February 18 is intended to supply the growing demand for the training of practical gamekeepers and wardens and those who wish to take up the propagation and care of wild fowl as a commercial pursuit. Although it is manifestly impossible to give in twelve weeks full preparation for such work, this course will start the student in the right direction, enable him to avoid many mistakes, and offer him facts and principles of value gleaned from the lifelong experience, study, and observation of others. In this course the work in poultry husbandry is used to a considerable extent as a basis, not only because of its intrinsic value but also because in this closely related field both practical and educational methods are already well established.

This course in game breeding is administered like the other short courses given in the College of Agriculture earlier in the year, and the announcement of these earlier courses, which may be obtained from the Secretary of the College, contains general information of interest to students in the game-breeding course. Special attention is directed to the following details, which are essential to the course in game breeding.

Admission. The short course is a business and occupational course, not academic; hence there are no examinations for admission. However in order that the student may be able to make the best use of the instruction it is necessary that he should have a good common school education. Short course students sometimes are seriously handicapped in their work by being deficient in arithmetic and in English. Persons who are planning to take the short course are advised to review these subjects before coming to Ithaca.

All the courses are open to both men and women of at least eighteen years of age.

Application. This circular contains an application blank for admission to the course, and this should be made out in full and forwarded to the Secretary at once by any person who is planning, as yet even indefinitely, to attend the course. The filing of an application for admission does not constitute an obligation to attend, and applications may be withdrawn at any time.

Any one who has graduated from the common schools of the State, or who has an eighth grade certificate, should be able to do the short course work satisfactorily. When making application, candidates for admission should give a description of their school training and if possible should send a certificate or a statement from the teacher of the school last attended.

Tuition. Tuition is free to those who are residents of New York State and have been so for the period of a year before entrance. Nonresidents pay \$25.

Infirmary fee. Every student registered at Ithaca is charged an infirmary fee of \$3 a term, payable at the beginning of each term. Students in the short courses are required to pay the infirmary fee for one term. In return for the infirmary fee, any sick student is, on his physician's certificate, admitted to the infirmary, and is given without further charge a bed in a ward, board, and ordinary nursing, for a period not exceeding two weeks in any academic year. Extra charges are made for private rooms, special food, and special nurses. If a sick student who has not received two weeks' service in the year is refused admittance

NEW YORK STATE COLLEGE OF AGRICULTURE AT CORNELL UNIVERSITY

APPLICATION FOR ADMISSION TO THE SHORT COURSE IN GAME BREEDING

Name of applicant IN FULL
(e.g., John James Jones)

Permanent home address (number and street, or R. F. D.).....

Place.....County.....State

Date of birth, month.....day.....year.....

Nationality.....Married.....Date.....

Name of parent or guardian, or person to be notified in case of serious illness or accident.....

Address of parent or guardian.....

Name of school or college last attended.....

Place.....State.....When?.....How long?.....

Have you ever before registered in this or any other college?.....

When?.....Where?.....In what course?.....

Have you received any degree or certificate?.....What?.....Where and when?.....

OVER

What has been your practical experience in farm work and in the special work covered by the course in which you are registering?

What has been your residence and occupation during the last five years?

Occupation 1913.....Place.....State.....

Occupation 1914.....Place.....State.....

Occupation 1915.....Place.....State.....

Occupation 1916.....Place.....State.....

Occupation 1917.....Place.....State.....

What church do you attend?.....

REFERENCES.*—I am personally acquainted with the above applicant and know.....to be of good moral character, industrious, studious, and physically and otherwise capable.

Name.....Name.....

Position.....Position.....

Address.....Address.....

*Two endorsements are necessary, and should be preferably by your teacher and your pastor or a public official. These persons should sign the application themselves.

NOTE—The applicant must answer ALL the questions asked on both sides of this application blank. When the blank has been answered in full, mail it to Cornelius Betten, Secretary, College of Agriculture, Cornell University, Ithaca, New York.

to the infirmary by reason of lack of accommodation, he is entitled to a refund of the fee.

Laboratory fee. The laboratory fee is \$10, and students are further responsible for breakage due to carelessness on their part.

Other expenses. Judging by the experience of students in other short courses the total expense of the twelve weeks will be from \$150 to \$175. The expense for those who remain for the work on the farm through the summer will of course be greater.

Registration. On Monday, February 18, beginning at 9 a. m., all students must report for registration at the office of the Secretary of the College of Agriculture, Roberts Hall, room 192. At 4 p. m. on registration day there will be an assembly of short course students, addressed by members of the teaching staff.

Methods of instruction. The required work listed below includes lectures at 9 o'clock five days a week, and many others will be announced for 10 o'clock. The special public lectures, which short course students are required to attend, will come at 4.45 as announced. There will be laboratory work from 2 to 4 on five days a week and at other hours by appointment. The practice will include such topics as game birds and waterfowl, feeds and feeding, varieties and breeding, parasites and predatory enemies, need of shelter and covering, rearing pens and cages, capturing and shipping, crops for cover and for food, game farm plans, water supply, and accounts. One or more trips will be made for inspection of a few well-managed game farms and estates.

Description of the courses

1. **Poultry and Game Farming.** Fifteen hours a week. Lectures, daily except Saturday, 9, and 10 when announced. Place to be announced. Professors RICE and NEEDHAM, Assistant Professors ALLEN, BENJAMIN, and EMBODY, and others. Practice, daily except Saturday, 2-4. Places to be announced. Messrs. QUARLES, KRUM, and others.

2. **Practice in Flock Management.** One hour a week. Practice periods and extra time arranged by appointment. Practice, three times daily (including Sunday) for four weeks, 7.45-8.15, 12.30-1, 4.30-5. Poultry Plant. Messrs. ANDREWS and ———.

Practice in record keeping and management of fowls for egg production and for fattening, including preparation for market. A series of observations and tests will be carried on by the class.

3. **Practice in Incubation.** One hour a week. Practice periods and extra time arranged by appointment. Practice, three times daily (including Sunday) for four weeks, 7.45-8.15, 12.30-1, 4.30-5. Poultry Building 1. Messrs. BUCHAN and ———.

Practice in operating incubators; testing eggs, keeping records, and comparisons of results. A series of interesting tests will be carried on by members of the class.

4. **Practice in Brooding and Rearing.** One hour a week. Practice periods and extra time arranged by appointment. Practice, three times daily (including

Sunday) for four weeks, 7.45-8.15, 12.30-1, 4.30-5. Poultry Plant. Messrs. BUCHAN and ———.

Practice in the management of a brooder and a flock of chickens; the keeping of temperature, food, and growth records.

5. Mechanical Appliances of Poultry and Game Farming. One hour a week. Practice by appointment, two and one-half hours a week. Poultry Building 125. Messrs. BUCHAN and ———.

Demonstration in the use of gasoline engines, power bone-cutters, a feed mill, a power saw, a feed mixer, and other equipment; making coops, catching hooks, traps, and other appliances.

Practice on the Game Farm. Beginning May 13 a limited number of students will be given practical work on the state game farm at Cornell University, and this will continue to September 1, provided the contract for the purchase is concluded and the equipment is available for the work. At the conclusion of the course on May 11 those who wish to do so may obtain employment on any approved game farm or game preserve and gain their practical experience there instead of on the Cornell farm.

3. Special Public Lectures on Wild Life Conservation and Game Farming

Due to the generosity of Frederic C. Walcott, of New York City, who has contributed the sum of \$500 to defray the expenses of the project, the College is enabled to announce the following public lectures on various problems related to wild life conservation. The dates of the lectures will be separately announced.

Clinton G. Abbott. Still life photography of birds.

Ernest Harold Baynes. Lecturing on birds. Bird club organization.

John B. Burnham. Practical deer farming.

Warwick S. Carpenter. The organization of the forces of a State for wild life conservation.

Lee S. Crandall. The care and breeding of aviary birds, with special reference to pheasants and waterfowl.

Dr. A. K. Fisher. The raptorial birds.

Edward Howe Forbush. The economic value of birds.
The rat and the cat problem.

Louis Agassiz Fuertes. The painting of birds.

Herbert K. Job. Moving picture photography of wild life.
Wild turkey breeding.

The breeding of the diving ducks.

Niel Morrow Ladd. Organizing a community for bird protection.

Llewellyn Legge. The part played by the warden force in protecting and increasing the wild life of a State.

W. L. McAtee. Plant life that is attractive to wild ducks.

Donald MacVicar. Ruffed grouse breeding.

T. Gilbert Pearson. The national movement for wild life conservation with special reference to sanctuary work and implanting a knowledge of bird life in the juvenile mind.

Emmet Augustus Quarles. Wild life conservation and its relation to game breeding.

The pheasants.

First steps in pheasant breeding.

Miscellaneous problems of pheasant breeding—vermin, disease, and the like.

Establishing and holding pheasants on preserves.

State game farms, and pheasants in their relation to agriculture and the food supply.

Quail breeding.

Mallard duck breeding.

Wood duck breeding.

Harry T. Rogers. The preparation of pheasant rations and methods of combating vermin.

The care and rationing of young pheasants.

Bradford A. Scudder. Professional conservation work on estates.

Clyde B. Terrell. The sowing and planting of foods that attract wild ducks.

John W. Titcomb. Modern methods in stocking waters with food and game fishes.

Correspondence concerning the publication of Cornell University should be addressed to the Secretary of Cornell University, Ithaca, New York.

This publication is issued at Ithaca, New York, monthly from July to November inclusive, and semi-monthly from December to June inclusive.

[Entered as second-class matter, December 14, 1916, at the post office at Ithaca, New York, under the act of August 24, 1912.]

The Annual Register (for the year 1917-18, published January 1, 1918), price 50 cents.

Book of Views, price 25 cents.

Directory of Faculty and Students, First Term, 1917-18, price 10 cents, and the following informational publications, any one of which will be sent gratis and post-free on request. The date of the last edition of each is given after the title.

General Circular of Information for Prospective Students, December 15, 1917.

Announcement of the College of Arts and Sciences, March 15, 1917.

Announcement of Sibley College of Mechanical Engineering and the Mechanic Arts, January 15, 1917.

Announcement of the College of Civil Engineering, April 15, 1917.

Announcement of the College of Law, May 15, 1917.

Announcement of the College of Architecture, July 1, 1917.

Announcement of the New York State College of Agriculture, June 1, 1917.

Announcement of the Winter Courses in the College of Agriculture, June 15, 1917.

Announcement of the Summer Term in Agriculture, April 1, 1917.

Announcement of Instruction in Wild Life Conservation and Game Breeding, January 15, 1918.

Announcement of the New York State Veterinary College, May 1, 1917.

Announcement of the Graduate School, February 15, 1917.

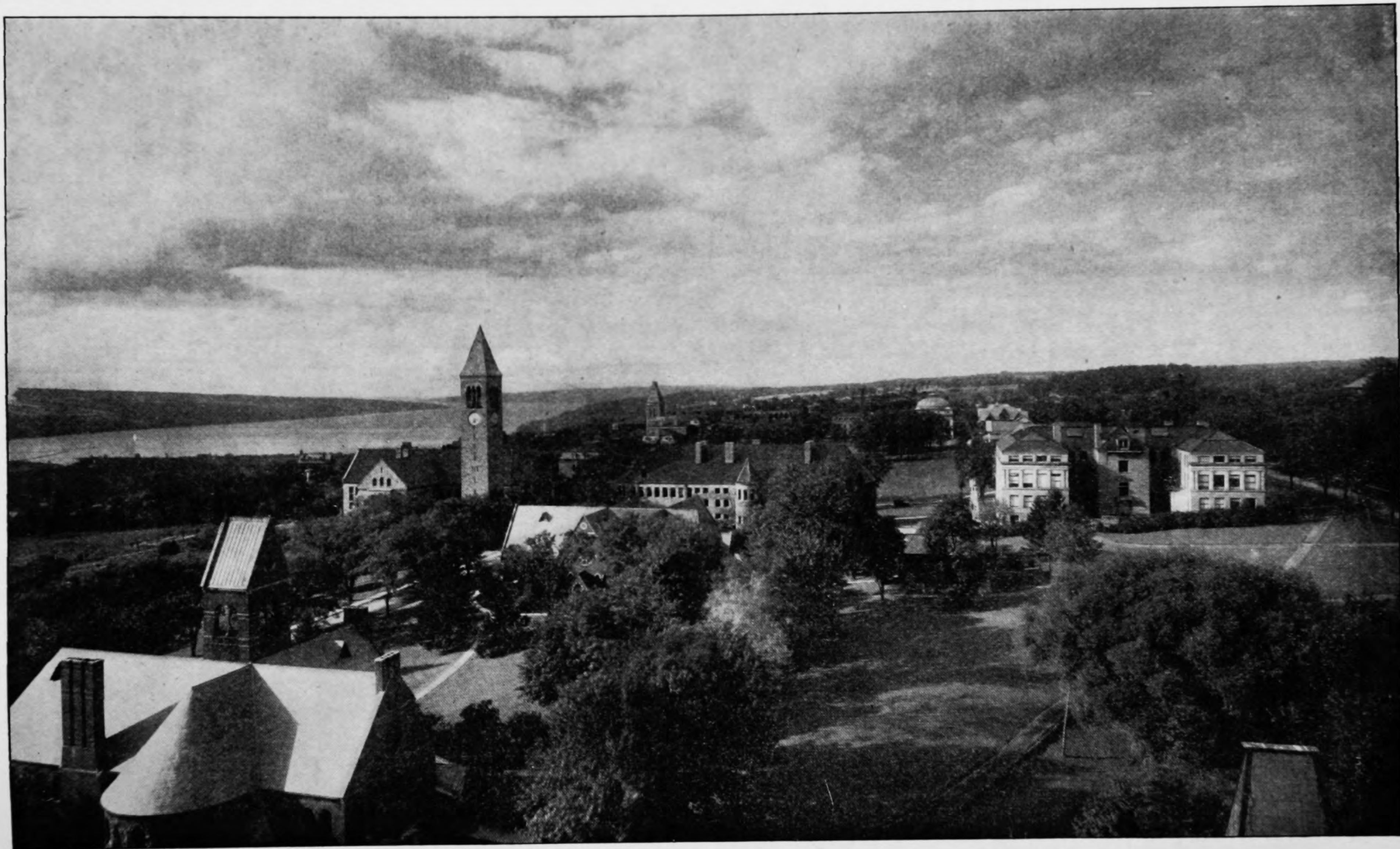
Announcement of the Summer Session, March 1, 1917.

Annual Report of the President, September 1, 1917.

Pamphlet on prizes, August 1, 1917.

Samples of entrance and scholarship examination papers, December 1, 1917

Announcement of the Medical College may be procured by writing to the Cornell University Medical College, Ithaca, New York.



Looking North toward the Quadrangle with Sibley College in the Distance